

Total Maximum Daily Load

The Total Maximum Daily Load (TMDL) program falls within the 4S03 value stream if ADEQ, the responsible unit covers the federal Clean Water Act § 303(d) requirements as identified through the act, regulation, case law, and guidance. Primary among these is sampling, analyzing and synthesizing data to create TMDLs to address impaired waters in support of the AZPDES/NPDES program. This effort is funded wholly by the PPG and state funds.

EPA has concerns about ADEQ's ability to meet program requirements and workplan goals that have been identified by ADEQ. Several of these items have persisted over several state fiscal years, without being completed. ADEQ should focus on completing its current workplan items and identifying more readily achievable goals for future workplans. Some questions are raised about the application of funds.

EPA Assessment of TMDL

1. Program performance

- a. Highlights: The Santa Cruz River TMDL for *escherichia coli* will soon be submitted to EPA for review and decision.
- b. Major workplan tasks, timeliness, quality, obstacles/challenges/delays/adjustments
 - i. Santa Cruz River TMDL for e. coli: This submission was due to EPA initially 12/31/2018, date was moved to 8/15/2019, anticipated to EPA on 9/16/2019 and has not yet been received.
 - ii. San Pedro River TMDL for e. coli: The draft was estimated to be submitted 10/01/2019, subsequent sampling and analysis on the watershed has shifted ADEQ approach to focus on a pilot project in the Babocomari subwatershed in partnership with the NRCS. This adjustment needs to be reflected in planned dates and deliverables; this will also be a change to a "2022 Vision Priority" TMDL that ADEQ committed to complete.
 - iii. Pinto Creek TMDL for copper
 - iv. Queen Creek TMDL for copper
 - v. Identify high-priority restoration and protection watersheds for NPS resources and share with EPA/on ADEQ website. (Strategy 1.b.i; Strategy 1.b.ii)
- c. Deliverables
 - i. Santa Cruz River TMDL for e. coli
 - ii. San Pedro TMDL for e. coli
 - iii. Pinto Creek TMDL for copper
 - iv. Queen Creek TMDL for copper
- d. Recurring/persistent concerns still not addressed
 - i. Stalled or canceled TMDLs: The delay of Pinto Creek TMDL to reflect the approach taken in the draft Queen Creek TMDL raises questions about how the drafts were able to diverge over the several years both have been in progress. Similarly, it is concerning that the completion of the Queen Creek TMDL has been stalled in response to a request for refined modeling which may not yield significantly different results; this is workplan item that has persisted for more than four state fiscal years. The restructuring and re-focusing of the San Pedro TMDL's geographic scope to a smaller area, given that it was identified as a vision priority TMDL, raises concerns about the level of analysis ADEQ staff are able to provide prior to moving forward on large and resource intensive projects. This issue is repeated in WQS as well, where unrealistically brief timelines crafted by ADEQ have handicapped projects.
 - ii. TMDL Alternatives and TMDL like interventions: ADEQ's "watershed based approach" initiative centered on interventions to improve water quality in the Verde

and Oak Creek, San Pedro River watersheds and the Bradshaw mountains. This work was conducted by the 4S03 value stream and will hopefully have an impact on the findings of the future integrated reports. Documentation of these efforts has been requested, but only recently received. As these are TMDL like interventions, they should be crafted as TMDL alternatives “5-alts” – this note and guidance documentation has been provided to ADEQ previously.

2. Fiscal Analysis PPG

- a. Insufficient information is provided at the program level in the PPG reports to determine whether potential ULO, drawdowns, or de-obligated or redirected funds occur.
- b. ADEQ has not provided information on what the funds allocated for the Queen Creek TMDL have been applied to in lieu of this project’s completion.

3. Solutions: Agreements or Correct Actions

- EPA suggests that ADEQ can address the efforts and impacts it has completed in the TMDL like interventions by providing summaries that meet the “5-alt” guidance or work with the Non-Point Source program.
- EPA suggests that ADEQ focus on finalizing the San Pedro River/Babocomari River TMDL, the Pinto Creek TMDL, and the Queen Creek TMDL. EPA and ADEQ should work closely in identifying and agreeing to new future workplan items to better reflect the realities ADEQ is facing and the application of funds.

4. SFY20 Priorities

- a. Completion of outstanding TMDLs: Babocomari, Pinto Creek, Queen Creek
- b. Support for and capacity building for ADEQ TMDL unit